

# Work Order ID 86570

July-05-12 10:45:18 AM

Aug 15

\*86570\*

Page 1

Item ID: D350-591-312 Accept \*N900040100\* Setup Start \*NS1\*  
 Revision ID: Stop \*NS2\*  
 Item Name: Heli-Access-Step, Long RH  
 Start Date: 7/05/12 Start Qty: 10.00 \*10\* Cust Item ID:  
 Required Date: 7/27/12 Req'd Qty: 10.00 \*10\* Customer:  
 Reference:

Approvals: Process Plan:                      Date:                      Tooling:                      Date:                      Run Start \*NR1\*  
 QC:                      Date:                      SPC (Y/N):                      Date:                      Stop \*NR2\*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
D3272	Rev B								

100		0.00							
*100*	DOCUMENT CONTROL								
DC	Memo	0.00							
Document Control	Photocopy bluefile and type labels as per PPP D350-591-312 CHG001								
110		0.00							
*110*	Large Fab								
Large Fab	Memo	0.00							
Large Fab	1-Bevel end for welding FWD ONLY								
	2-Weld Support using Jig DT8719, weld Fwd End Plate as per QSI 004 & Dwg D3272								
	A/R Aluminum Rod 120854								
	3-Grind End Plate flush 122130								

10 12 08 01  
 12-8-1  
 10  
 10 12 07 13  
 12 07 24

**\*86570\***

July-05-12 10:45:18 AM

**\*N900040100\***

Setup Start \*NS1\*

Stop \*NS2\*

**\*10\***

**Cust Item ID:**

**\*10\***

**Customer:**

**Reference:**

Run Start \*NR1\*

**Approvals:** \_\_\_\_\_ **Process Plan:** \_\_\_\_\_ **Date:** \_\_\_\_\_ **Tooling:** \_\_\_\_\_ **Date:** \_\_\_\_\_

Stop \*NR2\*

QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Accept Qty	Reject Qty	Reject Number	Insp. Stamp

0.00

**\*120\***

OC

## Memo

0.00

## Quality Control

0.00

**\*130\***

QC

## Memo

0.00

## Quality Control

0.00

\*140\*

HandFinish

## Memo

0.00

## Hand Finishing

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Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_ Run Start \*NR1\*  
 QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_ Stop \*NR2\*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
150 *150* QC Quality Control	QC3- Inspect Part Finish  Memo	0.00  0.00				10	Ø		<i>Mc</i> 12.07.26
180 *180* Large Fab Large Fab	Large Fab  Memo 1-Assemble Leg Assembly as per Dwg D3272. 2-Leave one rivet out until welding is complete. 3-Bevel Aft end for welding 4-Inspect for foreign object as per QSI 024 5-Weld Aft End Plate as per QSI 004 & Dwg D3272 A/RAluminum Rod 120854 6-Grind End Plate flush 7-Install last rivet as per Dwg.	0.00  0.00				10	Ø		<i>Ac</i> 12.07.26 <i>Ac</i> 12.07.27 12.07.27

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Approvals: Process Plan: Date: Tooling: Date: Run Start \*NR1\*  
QC: Date: SPC (Y/N): Date: Stop \*NR2\*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
190 *190* QC Quality Control	QC10- Inspect visual per QSI004- ground welds  Memo	0.00 0.00		12/4/30		410			
200 *200* QC Quality Control	QC5- Inspect part completeness to step on W/O  Memo	0.00 0.00		12/4/30					
210 *210* HandFinish Hand Finishing	Chemical Conversion Coat per QSI005 4.1  Memo	0.00 0.00				10	7/6	12-7-30	

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Approvals: Process Plan: Date: Tooling: Date: Run Start \*NR1\*  
 QC: Date: SPC (Y/N): Date: Stop \*NR2\*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
220 *220* Powdercoat Powder Coating	White Gloss(Ref:4.3.5.1) per QSI005 4.3-Alum	0.00				10X	✓		M/L 12/07/31
Memo 7:40 START TIME: 320 °F OVEN TEMPERATURE: 8:10 FINISH TIME:									
230 *230* HandFinish Hand Finishing	Wing Walk as per dwg QSI005 4.4 Batch	0.00							10 RH & M/L 12/31
Memo									
240 *240* QC Quality Control	QC3- Inspect Part Finish	0.00				10 RH	⊗	⊗	12/07/31
Memo									

M 121841

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Item ID: D350-591-312 Accept **\*N900040100\*** Setup Start **\*NS1\***  
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 Required Date: 7/27/12 Req'd Qty: 10.00 **\*10\*** Customer:  
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Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_ Run Start **\*NR1\***  
 QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_ Stop **\*NR2\***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
250	Pick Kit	0.00							
<b>*250*</b>						10			12/08/01 JB
Packaging	Memo	0.00							
Packaging									
260	QC4- 100% Inspect kits for completeness	0.00							
<b>*260*</b>						10			12/08/01
QC	Memo	0.00							
Quality Control									
270		0.00							
<b>*270*</b>	Packaging					10			12/08/14
Packaging	Memo	0.00							
Packaging	Identify and pack for shipping as per PPPD350-591-312								
	Location: <u>HAI</u>								

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Item ID: D350-591-312

Accept

**\*N900040100\***

Setup Start **\*NS1\***

Revision ID:

Stop **\*NS2\***

Item Name: Heli-Access-Step, Long RH

Start Date: 7/05/12 Start Qty: 10.00

**\*10\***

Cust Item ID:

Required Date: 7/27/12 Req'd Qty: 10.00

**\*10\***

Customer:

Reference:

Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_

Run Start **\*NR1\***

QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Stop **\*NR2\***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
280	QC21- Final Inspection - Work Order Release	0.00							
<b>*280*</b>									
QC	Memo	0.00							
Quality Control									

12/8/3 48  
MCS 12/08/02

# Picklist Print

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Work Order ID: 86570

Parent Item: D350-591-312

Parent Item Name: Heli-Access-Step, Long RH

Start Date: 7/05/12

Required Date: 7/27/12

Start Qty: 10.00

Required Qty: 10.00

Comments: IPP Rev:A04.03.22New issue KJ/RF  
 IPP Rev:B 07-06-09 Added D3572-1 JLM  
 IPP Rev:C 08-04-02 ECN1163 DD verified by:EC  
 IPP Rev:D 08-04-08 ECN1164 DD verified by:EC  
 10.04.28 verified by:EC  
 IPP Rev:D five route seq in bom DD

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D3272-1 Step		Manufactured	No			110	Each	5.0000	1	10		Ac 12.07-11	
				<u>Location</u>		<u>Loc Qty</u>		<u>Loc Code</u>					
				ST		-10							
				WA		15							
				84812		5							
D3067-1 End Plate		Manufactured	No			110	Each	133.0000	1	10		12.07-13	
				<u>Location</u>		<u>Loc Qty</u>		<u>Loc Code</u>					
				WA		129							
				78608		4							
				83855		50							
				84534		75							
				WA016		4							
				67582		2							
				68214		1							
				79607		1							
D3219-1 Plate		Manufactured	No			110	Each	250.0000	2	20		12.07-13	
				<u>Location</u>		<u>Loc Qty</u>		<u>Loc Code</u>					
				WA		191							
				82221		74							
				83852		117							
				WA016		18							
				73410		12							
				77674		6							
				WA017		41							
				81971		41							



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Work Order ID: 86570

Parent Item: D350-591-312

Start Date: 7/05/12

Required Date: 7/27/12

Parent Item Name: Heli-Access-Step, Long RH

Start Qty: 10.00

Required Qty: 10.00

D3066-1 Manufactured No 180 Each 99.0000 2 20

Spacer

B86964 → 20  
Ac 12.07.26

Location	Loc Qty	Loc Code
ST176	31	
83854	31	
WA	68	
85449	68	

MS20600-AD4W4 Purchased No 180 Each 3,202.0000 16 160

Rivets

Ac 12.07.26

Location	Loc Qty	Loc Code
321	878	
121652	878	
ST321	2324	
121011	9	
121340	315	
121444	2000	

160

D3065-041 Manufactured No 180 Each 73.0000 1 10

Step Leg Assembly Hi

Ac 12.07.26

Location	Loc Qty	Loc Code
WA	73	
66149	0	
79336	1	
83870	32	
83871	40	

10

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Work Order ID: 86570

Parent Item: D350-591-312

Start Date: 7/05/12

Required Date: 7/27/12

Parent Item Name: Heli-Access-Step, Long RH

Start Qty: 10.00

Required Qty: 10.00

D3067-1 Manufactured No  
End Plate

180 Each 133.0000

1 10

12.07.27

Location	Loc Qty	Loc Code
WA	129	
78608	4	
83855	50	
84534	75	10
WA016	4	
67582	2	
68214	1	
79607	1	

AN3-35A Purchased No  
Bolt

250 Each 76.0000

2 20

JB

Location	Loc Qty	Loc Code
ST353	76	
121652	76	20

D3235-1 Manufactured No  
Mounting Lug

250 Each 146.0000

2 20

JB

Location	Loc Qty	Loc Code
ST481	146	
83311	46	20
83853	100	

D3278-041 Manufactured No  
Support Assembly

250 Each 93.0000

1 10

JB

Location	Loc Qty	Loc Code
ST471	40	
83857	40	JB
ST481	53	
83856	13	3x
83858	40	

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Shop Packet Print

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Work Order ID: 86570

Parent Item: D350-591-312

Parent Item Name: Heli-Access-Step, Long RH

Start Date: 7/05/12

Required Date: 7/27/12

Start Qty: 10.00

Required Qty: 10.00

AN960JD416  
Washer

NAS1149D0463J Purchased

No

250 Each

29.0000

16

160

MR2441358

## Location

## Loc Qty

## Loc Code

ST351

29

116289

8

119097

21

AN960JD516  
Washer

NAS1149D0563J Purchased

No

250 Each

12.0000

4

40

JB M19546

## Location

## Loc Qty

## Loc Code

ST338

12

2612

12

AN5-36A  
Bolt

Purchased

No

250 Each

224.0000

2

16x 20

M122416

JB

## Location

## Loc Qty

## Loc Code

340

74

121652

74

ST340

150

121708

50

122141

100

D2618  
Bushing

Manufactured

No

250 Each

204.0000

2

20

JB

## Location

## Loc Qty

## Loc Code

ST012

204

76130

2

83614

1

84646

201

D2230-3  
Lug

Manufactured

No

250 Each

158.0000

4

40

JB

## Location

## Loc Qty

## Loc Code

ST480

158

83261

2

84133

156

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Work Order ID: 86570

Parent Item: D350-591-312

Parent Item Name: Heli-Access-Step, Long RH

D2856-400 Manufactured No

Abrasion Strip

cut (2) D2856-400-720 as per dwg

## Location

## Loc Qty

ST403	159.398
81875	159.398
ST409	9.4445
63735	0.6696
68076	0.3149
71164	8.46

## Loc Code

Start Date: 7/05/12

Required Date: 7/27/12

Start Qty: 10.00

Required Qty: 10.00

168.8425 1.2 12

MS21042L3

Nut

Purchased No

250 Each

3,330.0000 2 20

## Location

## Loc Qty

ST300	1330
117885	32
119017	771
119075	138
121444	389
ST317	2000
122141	2000

## Loc Code

AN4-13A

Bolt

Purchased No

250 Each

1,143.0000 8 80

## Location

## Loc Qty

ST357	1143
120187	19
120422	2
120770	12
121652	912
122063	198

## Loc Code

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# Picklist Print

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Work Order ID: 86570

Parent Item: D350-591-312

Parent Item Name: Heli-Access-Step, Long RH

Start Date: 7/05/12

Required Date: 7/27/12

Start Qty: 10.00

Required Qty: 10.00

MS21042L5 Purchased No

250 Each 1,224.0000 2 20

Nut

Location

Loc Qty

Loc Code

300 500  
121652 500  
ST300 724  
108827 4  
116105 5  
116548 43  
117611 2  
119109 658  
17651 4  
2937 8

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
20  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

MS21042L4 Purchased No

250 Each 1,705.0000 8 80

Nut

Location

Loc Qty

Loc Code

ST300 1705  
119075 116  
121011 193  
121444 1096  
121652 300

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
80  
\_\_\_\_\_  
\_\_\_\_\_

AN960JD10 NAS1149D0363J Purchased No

250 Each 0.0000 4 40

Washer

\_\_\_\_\_  
121524  
\_\_\_\_\_

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Shop Packet Print

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**DART**

DESIGN <i>GP</i>	DRAWN BY <i>B</i>	<b>DART AEROSPACE LTD</b> HAWKESBURY, ONTARIO, CANADA	
CHECKED <i>LE</i>	APPROVED <i>H</i>	DRAWING NO. D3272	REV. B SHEET 1 OF 3
DATE 07.05.18		TITLE STEP ASSEMBLY, HI LONG	SCALE NTS
A	04.03.01	NEW ISSUE	
B	07.05.18	D3272-1 WAS D2622-120	

**RELEASED**07 06 04 *H*

QTY -041	QTY -042	PART NUMBER	DESCRIPTION
X		D3272-041	STEP ASSEMBLY, HIGH LONG (LH)
	X	D3272-042	STEP ASSEMBLY, HIGH LONG (RH)
1	1	D3065-041	LEG ASSEMBLY
2	2	D3066-1	SPACER
2	2	D3067-1	END PLATE
2	2	D3219-1	SUPPORT
1	1	D3272-1	STEP
16	16	MS20600AD4W4	RIVET

**GENERAL NOTES:**

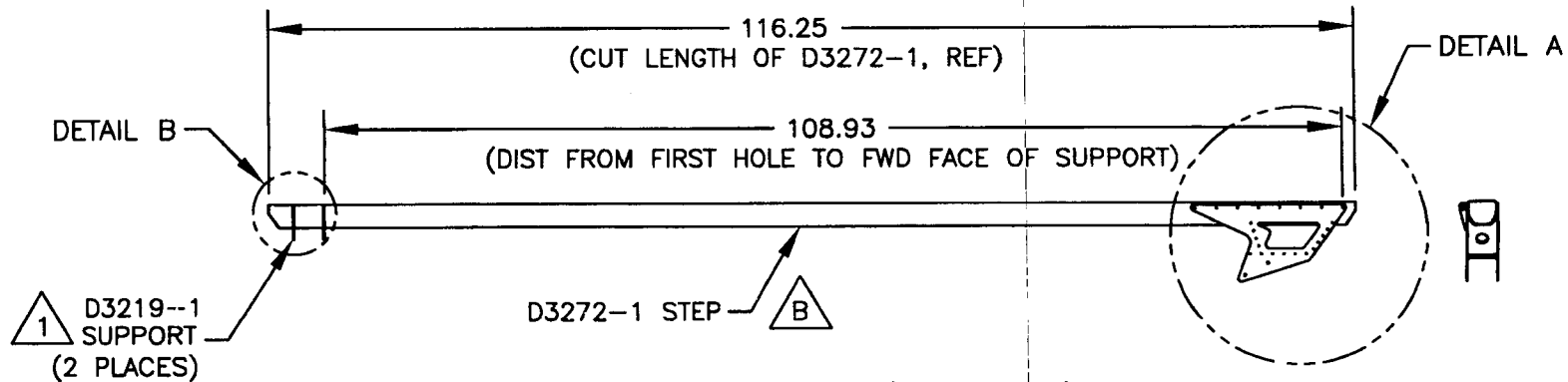
- 1) D3272-041 SHOWN. FOR D3272-042, INSTALL D3219-1 SUPPORT OPPOSITE SIDE
- 2) WELD PER DART QSI 004
- 3) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005.4.1  
POWDER COAT ASSEMBLY WHITE (4.3.5.1) PER DART QSI 005 4.3  
BLACK ANTI-SKID PAINT PER DART QSI 005 4.4
- 4) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED.
- 5) ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED.
- 6) BREAK ALL SHARP EDGES 0.005 TO 0.010 MAX.

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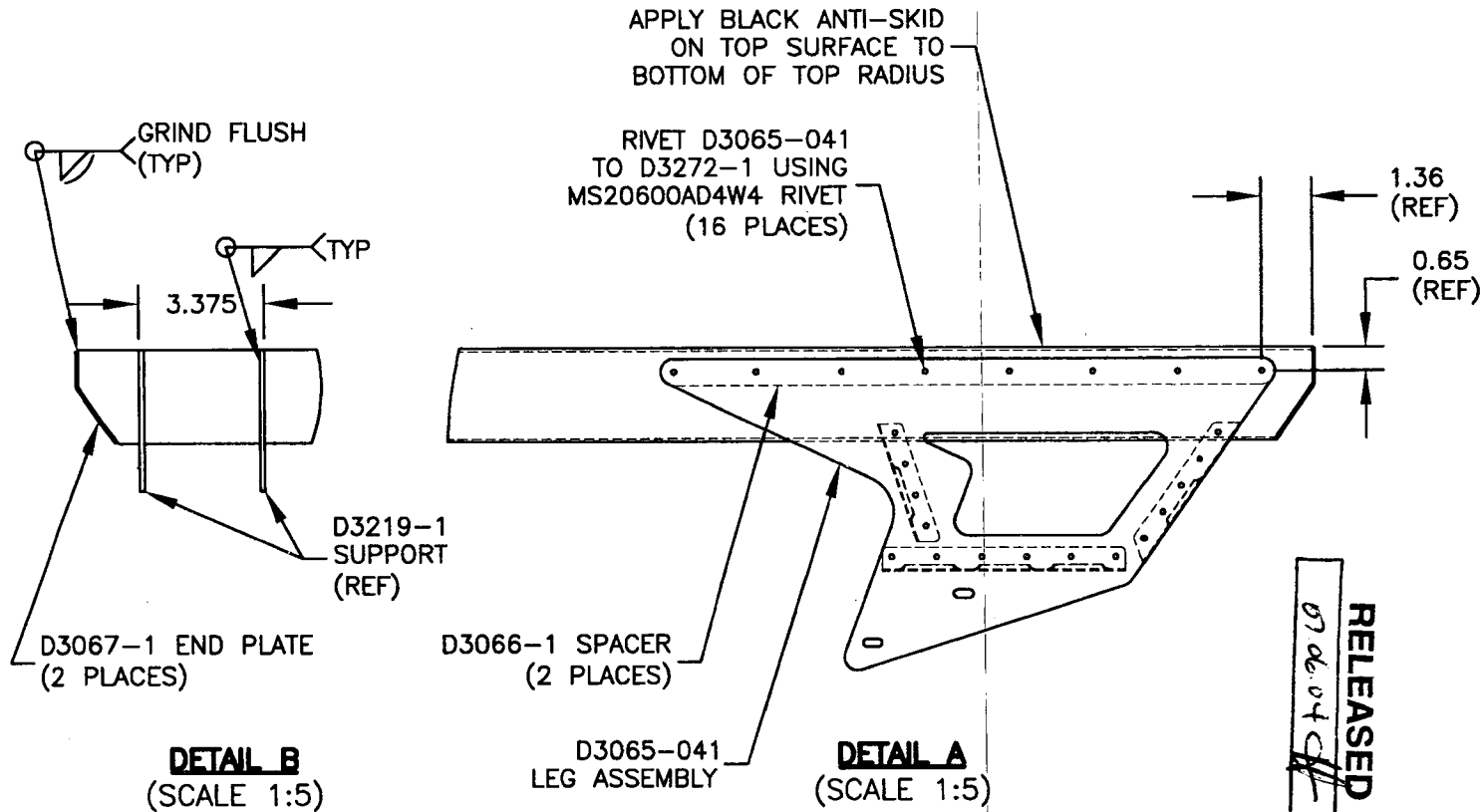
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DESIGN	AP	DRAWN BY	JR	DART AEROSPACE LTD
CHECKED	CE	APPROVED	JP	HAWKESBURY, ONTARIO, CANADA
DATE	07.05.18	DRAWING NO.	D3272	REV. B
		TITLE	STEP ASSEMBLY, HI LONG	SHEET 2 OF 3
				SCALE 1:20



**D3272-041 STEP ASSEMBLY (LH. SHOWN)**  
D3272-042 STEP ASSEMBLY (RH, OPPOSITE)

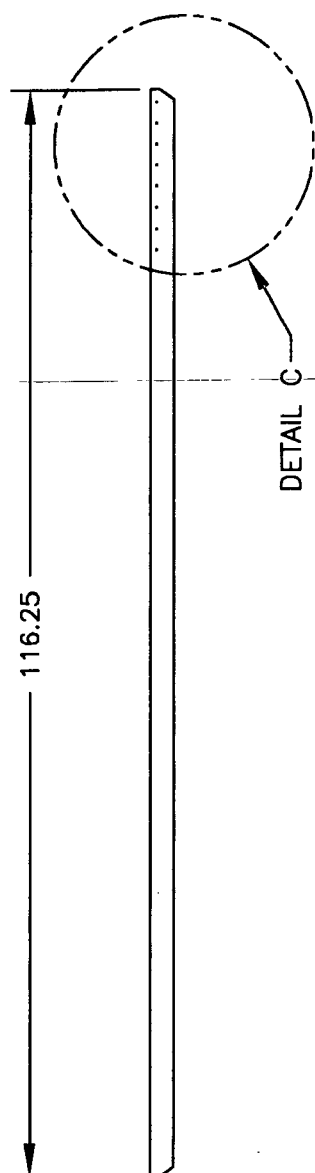




DESIGN <i>GP</i>	DRAWN BY <i>B</i>	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED <i>LE</i>	APPROVED <i>H</i>	DRAWING NO. D3272	REV. B SHEET 3 OF 3
DATE 07.05.18		TITLE STEP ASSEMBLY, HI LONG	SCALE 1:20

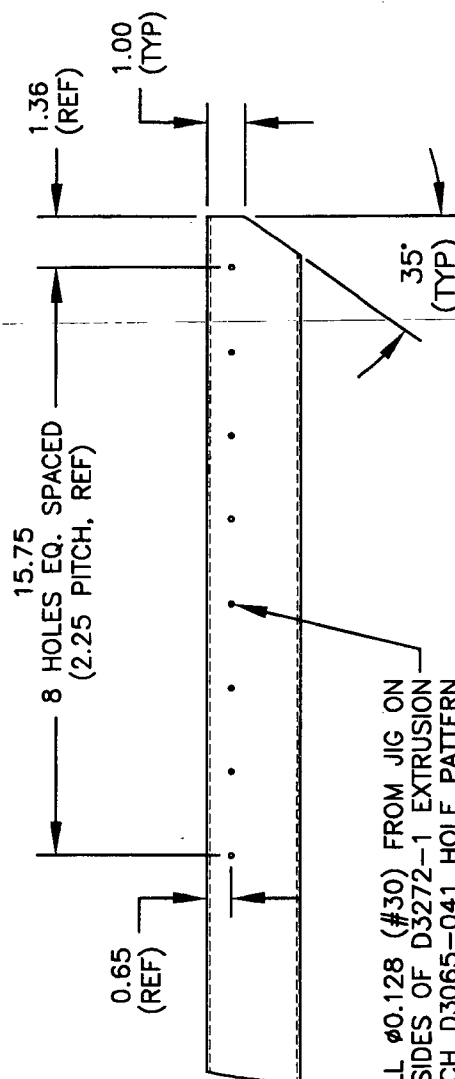
RELEASED

07.06.04 *[Signature]*



DETAIL C

**B D3272-1 STEP**  
(MAKE FROM D2622-120 STEP EXTRUSION)



**DETAIL C**  
(SCALE 1:5)

DRILL  $\phi 0.128$  (#30) FROM JIG ON  
BOTH SIDES OF D3272-1 EXTRUSION  
TO MATCH D3065-041 HOLE PATTERN

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